

$$5e^x + 9 = 18e^{-x}$$

$$x = \ln 3, \ln \frac{5}{4}$$

$$x = \frac{\infty}{7e^3}$$

$$x = \pm \ln 3$$

$$5e^x + 40e^{-x} = 33$$

$$1.497$$

$$x = \frac{9}{e^5 - 1}$$

Given that $\ln(y+2) - \ln y = 0.98$,
find the value of y correct to 1 d.p.

$$x = \frac{1}{2}(3 - e)$$

$$e^x = 3$$

$$e^{2x} + e^x = 6$$

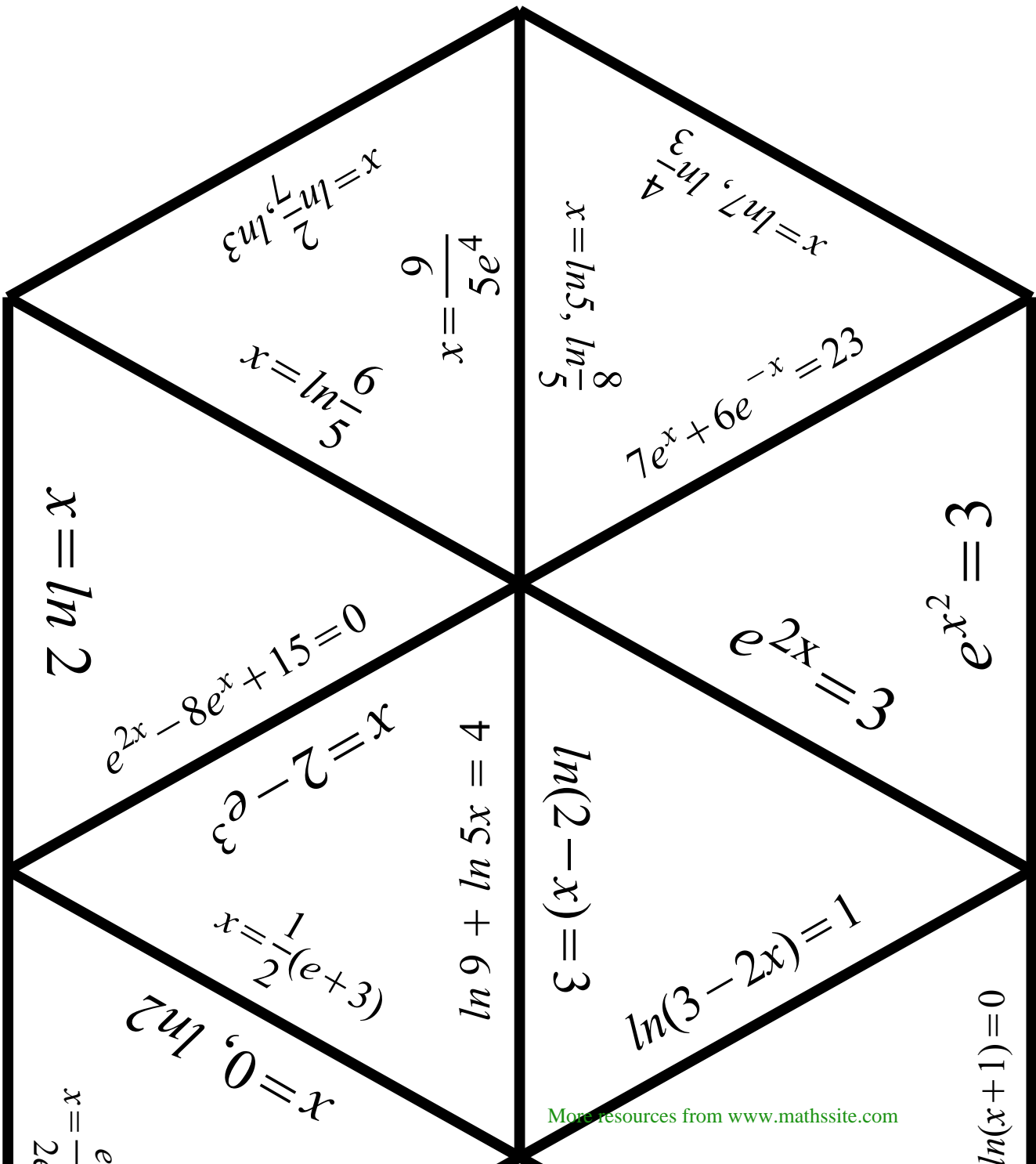
$$\ln 9 = \ln 5x - 6 \ln 4$$

$$e^{\frac{4}{45}} = x$$

Given that $\ln(y+5) - \ln y = 1.4$,
find the value of y correct to 3 d.p.

$$e^{2x} - 3e^x + 2 = 0$$

$$\ln(3x+1) - \ln(2x-1) = 1$$



$$x = \ln 2$$

$$e^{2x} - 8e^x + 15 = 0$$

$$x = 2 - e^3$$

$$x = 0, \ln 2$$

$$x = \frac{1}{2}e$$

$$x = \ln 2, \ln 3, \ln 7$$

$$x = \ln 6$$

$$x = \frac{9}{5e^4}$$

$$\ln 9 + \ln 5x = 4$$

$$\ln(2-x) = 3$$

$$\ln(3-2x) = 1$$

$$\ln(x+1) = 0$$

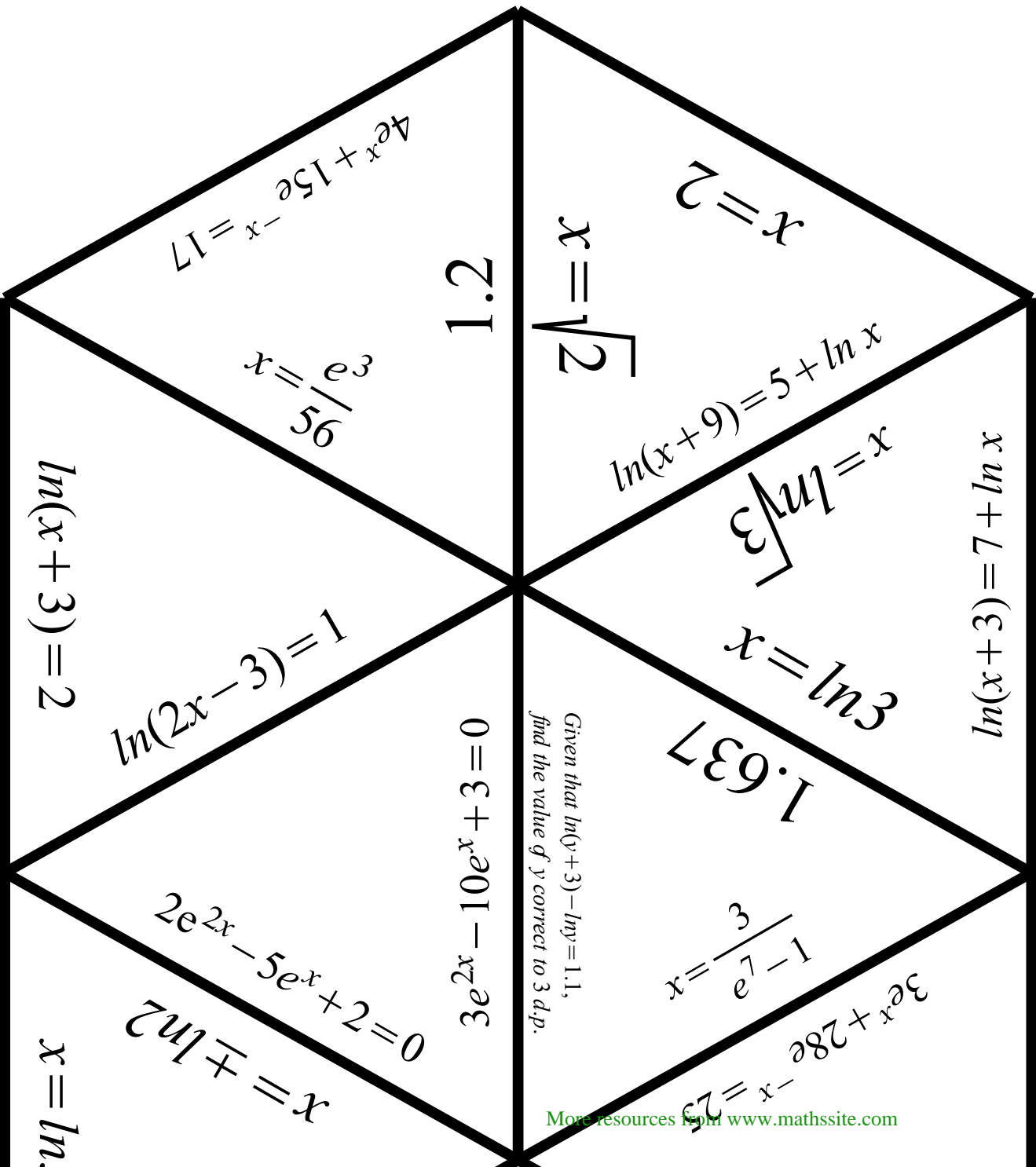
$$x = \ln 5, \ln \frac{5}{8}$$

$$7e^x + 6e^{-x} = 23$$

$$x = \ln 7, \ln \frac{3}{4}$$

$$e^{2x} = 3$$

$$e^{x^2} = 3$$



$$x = \ln 2$$

$$\ln(x+9) = 5 + \ln x$$

$$x \ln 7 + 6 = (3 + x) \ln 7$$

$$x = \sqrt{2}$$

$$x \ln 7 = x$$

$$1.637$$

$$x = \frac{3}{1 - e^{-7}}$$

$$3e^x + 28e^{-x} = 29$$

$$1.2$$

$$x = \frac{e^3}{56}$$

$$3e^{2x} - 10e^x - 3 = 0$$

Given that $\ln(y+3) - \ln y = 1.1$,
find the value of y correct to 3 d.p.

$$4e^x + 15e^{-x} = 17$$

$$\ln(2x-3) = 1$$

$$2e^{2x} - 5e^x + 2 = 0$$

$$x = \pm \ln 2$$

$$\ln(x+3) = 2$$

$$x = \ln 2$$